

(12) **United States Patent**
Desloover

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(54) **ROOF TILES AND RELATED SYSTEMS**

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See application file for complete search history.

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(57) **ABSTRACT**

(51) **Int. Cl.**

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F24J 2/04 (2006.01)

Roof tile systems for structures are provided. A representative system (100) includes a solar panel tile (102) having a top side (121) for facing away from a structure, a bottom side (122) for facing lower side (126) for facing the downslope direction, the solar panel (150), the solar panel tile (102) having a first rib (131, 132, 133, 134) extending across the cavity (128); and a solar panel (150) mounted within the cavity (128) and supported by the first rib (131, 132, 133, 134) such that the solar panel tile (102) being a first of multiple solar panel tiles (102), with the multiple tiles being operative to engage in a side-by-side arrangement to form at least a partial course of tiles of the system (100).

(52) **U.S. Cl.**

CPC **F24J 2/045** (2013.01)

USPC **52/173.3**; 52/518; 126/622

(58) **Field of Classification Search**

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14 Claims, 10 Drawing Sheets

